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Upon a motion duly made and seconded, the foregoing resolution was adopted by the following vote:



ROBERT ROWLAND, CHAIRMAN

AYE



LARRY ROSS, VICE CHAIR

AYE



KURT SCHLEGEL, COMMISSIONER

AYE

ATTEST: DALLAS SCHROEDER
COUNTY CLERK

BY: 

DEPUTY, CLERK TO THE BOARD





Kimley-Horn
and Associates, Inc.

December 18, 2013

■
Suite 200
990 South Broadway
Denver, Colorado
80209

Ms. Carol Farr
Elbert County
Foreman of Road & Bridge
P.O. Box 116
Kiowa, CO 80117

Re: Speed and Passing Zone Study
Delbert Road between Singing Hills Rd (CR 166) and E. Parker Road
Elbert County, Colorado

Dear Ms. Farr:

This letter has been prepared presenting the results of the Speed and Passing Zone Study conducted along Delbert Road in Elbert County, Colorado. The segment of Delbert Road between Singing Hills Road (CR 166) and E. Parker Road was studied. The length of the project is approximately four miles. This speed and passing zone study was prepared per the Manual on Uniform Traffic Control Devices (MUTCD), 2009 edition, standards and requirements.

A detailed field visit of the roadway conditions was conducted on Monday, December 9, 2013. This field visit measured expected travel speeds and roadway elevations for passing sight distance requirements. In addition, other roadside characteristics were observed overall as identified by the MUTCD when setting a speed limit as follows:

- A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- B. The pace;
- C. Roadside development and environment; and
- D. Parking practices and pedestrian activity;

This section of Delbert Road is currently posted at 40 miles per hour. Primarily, the roadway provides a single lane in each direction (northbound and southbound) throughout the entire 4-mile length. Between Singing Hills Road (CR 166) and the southern intersection of London Drive, Delbert Road has been widened to include northbound and southbound back-to-back left turn lanes at the Pinecrest Community Church access and Singing Hills Road. This center turn area is designated with a striped double yellow median north of the Pinecrest Church access to the southern intersection of London Drive.

Based on the speed data collected and the evaluation of the existing roadway characteristics, it is believed that the existing 40 mph speed limit is appropriate for the paved roadway segment of Delbert Road, between Singing Hills Rd (CR 166) and E. Parker Road. A 40 mph speed limit is recommended due to the existing roadway characteristics, vertical curvature, existing traffic volume, shoulder condition, and numerous accesses with relatively high turning movements to and from the roadway.

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TEL 303 228 2300



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In addition to this speed study, a passing zone study was prepared. Since the recommended speed limit is 40 miles per hour, the minimum passing sight distance along the roadway is 600 feet per the MUTCD, "Table 3B-1, Minimum Passing Sight Distances for No-Passing Zone Markings". The field data collected included obtaining vertical evaluations along Delbert Road using a handheld GPS. These elevations were entered into Excel and plotted to determine the vertical alignment. The profiles were studied to determine locations where 600 feet of passing sight distance was not available. These roadway segments were identified then for no-passing zone markings. The recommendations for passing and no-passing zones are shown in the following table from south to north along Delbert Road.

Delbert Road
Passing and No-Passing Zone Striping Recommendations

From	To	Approximate Distance	Centerline Stripe
Singing Hills Road	300 feet north of London Drive (south intersection)	0.25 miles	Double Yellow Solid No-Passing Both Directions
300 feet north of London Drive	900 feet north of London Drive	600 feet	Double Yellow Solid/Skip Passing Northbound No Passing Southbound
900 feet north of London Drive	700 feet south of Warsaw Drive	875 feet	Single Yellow Skip Passing Both Directions
700 feet south of Warsaw Drive	100 feet south of Warsaw Drive	600 feet	Double Yellow Solid/Skip No Passing Northbound Passing Southbound
100 feet south of Warsaw Drive	150 feet north of Meadow Station Road	1.65 miles	Double Yellow No-Passing Both Directions
150 feet north of Meadow Station Road	750 feet north of Meadow Station Road	600 feet	Double Yellow Solid/Skip Passing Northbound No-Passing Southbound
750 feet north of Meadow Station Road	600 feet south of Buckskin Road (south intersection)	650 feet	Single Yellow Skip Passing Both Directions
600 feet south of Buckskin Road (south intersection)	Buckskin Road (south intersection)	600 feet	Double Yellow Solid/Skip No-Passing Northbound Passing Southbound
Buckskin Road (south intersection)	Parker Road	1.25 miles	Double Yellow No-Passing Both Directions



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As you can see from the table, there are two zones where we believe that passing zones are appropriate. Both of these zones would allow passing for approximately a quarter mile in each direction. The southern zone is located between London Drive (southern intersection) and Warsaw Drive, and would allow passing for about 1,475 feet in each direction. The northern passing zone is located between Meadow Station Road and Buckskin Road (southern intersection), and would allow passing for about 1,250 feet in each direction. We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Curtis D. Rowe, P.E., PTOE
Vice President

